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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/021,093	12/19/2001	Hidetoshi Honbo	503.34465VV5	9945

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EXAMINER	
PARSONS, THOMAS H	

ART UNIT	PAPER NUMBER
1745	

DATE MAILED: 04/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/021,093	HONBO ET AL.	
	Examiner	Art Unit	
	Thomas H Parsons	1745	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 January 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-19* is/are pending in the application.

4a) Of the above claim(s) *1-7* is/are withdrawn from consideration.

5)☒ Claim(s) *13-16 and 18* is/are allowed.

6)☒ Claim(s) *8-12,17 and 19* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *19 December 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☒ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Claims 1-8 have been withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the Response filed 30 January 2004.

Priority

Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Japan on 10 April 1995. It is noted, however, that applicant has not filed a certified copy of the Japanese application as required by 35 U.S.C. 119(b).

Specification

The disclosure is objected to because of the following informalities:

Page 1, line 5, after "December 28, 1999", suggest inserting --(now U.S. Patent No. 6,383,467)--;

Line 6, after "April 10, 1996", suggest inserting –(now U.S. Patent No. 6,268,086);

Line 15, suggest changing "Lithium" to --lithium--; and,

Page 23, line 4, Table 1 is missing from the instant specification.

Appropriate correction is required.

Abstract

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

The instant abstract should be limited to a single paragraph.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 8-12, 17 and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Fong et al. (5,028,500).

Claim 8: Fong et al. in Figure 1 disclose a non-aqueous secondary battery (100) comprising laminated electrodes (20, 40) with graphite for a positive electrode and with a lithium group oxide for a negative electrode; and, a cell vessel (10) with an electrolyte solution. (col. 2: 50-col. 4: 60; col. 6: 48-col. 7: 47; col. 8: 3-33; col. 9: 43-45; col. 10: 28-47; and, col. 12: 15-45)

The recitation "wherein said electrodes laminated with graphite are manufactured by the steps of: pulverizing the graphite to graphite powder having a particle size equal to or smaller

than 100 μm, treating said graphite powder by heating at 900 °C. or higher, after said pulverizing, and fabricating said graphite electrodes by subjecting the heat-treated graphite powder to pressing" has been construed as a product by process limitation.

Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." In re Thorpe, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985).

Claim 9: The rejection of claim 9 is as set froth above wherein the limitation "said treating said graphite powder by heating is performed so as to modify crystallinity of the graphite powder such that a fraction of the graphite powder having rhombohedral structure is equal to or less than 20% by weight." has been construed as a product by process limitation.

Claim 10: The rejection of claim 10 is as set forth above wherein the limitation "in said treating said graphite powder by heating, said crystallinity of the graphite powder is modified so that a fraction of the graphite powder having hexagonal structure is equal to or greater than 80% by weight." has been construed as a product by process limitation.

Claim 11: The rejection of claim 11 is as set forth above wherein the limitation " wherein crystallinity of the graphite powder is modified during the heat treatment so that a fraction of the graphite powder having rhombohedral structure is equal to or less than 10% by weight." has been construed as a product by process limitation.

Claim 12: Fong et al. in Figure 1 disclose a non-aqueous secondary battery (100), comprising laminated electrodes (20, 40) with graphite for a positive electrode and with a lithium group oxide for a negative electrode; and, a cell vessel (10) with an electrolyte solution. (col. 2: 50-col. 4: 60; col. 6: 48-col. 7: 47; col. 8: 3-33; col. 9: 43-45; col. 10: 28-47; and, col. 12: 15-45)

The recitation "wherein said electrodes laminated with graphite are manufactured by the steps of: pulverizing the graphite to graphite powder having a particle size equal to or smaller than 100 μm, immersing said graphite powder into an acidic solution as an immersing treatment, said acidic solution containing at least one compound selected from a group consisting of sulfuric acid, nitric acid, perchloric acid, phosphoric acid and fluoric acid, and then washing said graphite powder with water, neutralizing, and drying said graphite powder, and fabricating said electrodes laminated with graphite by subjecting the dried graphite powder to pressing." has been construed as a product by process limitation.

E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." In re Thorpe, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985).

Claim 17: Fong et al. in Figure 1 disclose a non-aqueous secondary battery comprising:

graphite electrodes laminated with a lithium group oxide (20, 40), and, a cell vessel (10) with an electrolyte solution. (col. 2: 50-col. 4: 60; col. 6: 48-col. 7: 47; col. 8: 3-33; col. 9: 43-45; col. 10: 28-47; and, col. 12: 15-45).

The recitation "manufactured by the process of claim 16." has been construed as a product by process limitation.

E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." In re Thorpe, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985).

Claim 19: The rejection of claim 19 is as set forth above in claim 17.

Conclusion

2. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent No. 6,576,368 filed 24 August 1998 and issued to Moriguchi et al. on 10 June 2003 discloses methods of making a non-aqueous secondary battery, a non-aqueous secondary battery made by the same, a method of making a lithium battery, and a lithium battery made by the same wherein the batteries comprise electrodes laminated with graphite, and the electrodes are enclosed in a cell vessel with an electrolyte solution. The electrodes laminated with graphite are manufactures by the steps of pulverizing graphite powder, sieving the graphite powder to a desired mean diameter, a two step heat treatment of the pulverized powder, and fabricating graphite powder electrodes by subjecting the heat treated graphite powder to pressing.

JP03-041161 issued to Takeshi et al. on 21 February 1991 discloses immersing graphite powder in an acidic solution, washing, neutralizing and drying the graphite powder,

Because the instant application has an effective filing date of 10 April 1996, the Moriguchi et al. reference does not qualify as prior art under 102 or 103.

For this reason, claim 13-16 and 18 are in a condition for allowance.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas H Parsons whose telephone number is (571) 272-1290. The examiner can normally be reached on M-F (7:00-4:30) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Pat Ryan can be reached on (571) 272-1292. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Thomas H Parsons
Examiner
Art Unit 1745

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CAROL CHANEY
PRIMARY EXAMINER